

Practice 1-6

The Coordinate Plane

Graph each point in the coordinate plane.

1.  $A(-2, 5)$       2.  $B(5, -2)$       3.  $C(0, 6)$       4.  $D(-4, 0)$       5.  $E(-4, -2)$

Find the distance between the points to the nearest tenth.

6.  $L(-4, 11), M(-3, 4)$       7.  $N(1, 0), P(3, 8)$
8.  $Q(10, 10), R(10, -2)$       9.  $S(0, 5), T(0, -3)$
10.  $U(11, 0), V(-1, 0)$       11.  $W(2, 7), X(1, 2)$

Find the coordinates of the midpoint of each segment. The coordinates of the endpoints are given.

12.  $A(6, 7), B(4, 3)$       13.  $C(-1, 5), D(2, -3)$
14.  $E(14, -2), F(7, -8)$       15.  $O(0, 0), G(-5, 12)$
16.  $H(2.8, 1.1), I(-3.4, 5.7)$       17.  $J(2\frac{1}{2}, -\frac{1}{4}), K(3\frac{1}{4}, -1)$

18. The midpoint of  $\overline{AB}$  is  $(1, 2)$ . The coordinates of  $A$  are  $(-3, 6)$ .  
Find the coordinates of  $B$ .
19. The midpoint of  $\overline{CD}$  is  $(4, 11)$ . The coordinates of  $D$  are  $(4, 12)$ .  
Find the coordinates of  $C$ .
20. The midpoint of  $\overline{EF}$  is  $(-3, 7)$ . The coordinates of  $E$  are  $(-3, 10)$ .  
Find the coordinates of  $F$ .
21. Graph the points  $A(2, 1), B(2, -5), C(-4, -5)$ , and  $D(-4, 1)$ .  
Draw the segments connecting  $A, B, C$ , and  $D$  in order.  
Are the lengths of the sides of  $ABCD$  the same? Explain.
22. A crow flies to a point that is 1 mile east and 20 miles south of its  
starting point. How far does the crow fly?

Quadrilateral  $PQSR$  has coordinates as follows:  
 $P(0, 0), Q(-1, 4), R(8, 2)$ , and  $S(7, 6)$ .

23. Graph quadrilateral  $PQSR$ .
24. What is the perimeter of  $PQSR$ ?
25. What is the midpoint of  $\overline{QR}$ ?